

REMARKS

Claims 1-17 are pending in the present application.

REJECTIONS UNDER 35 U.S.C. 103

Claims 1, 2 and 4-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Duda.

Smith is cited as disclosing a trimmer comprising a base with a recess, a motor attached to rotating cutting elements, and two wheels which can be locked in a single direction thereby making them unidirectional. The Office admits that Smith fails to recite a universal joint attachment between the handle and the base.

Smith clearly sets forth the conditions in which the caster wheels would be converted to unidirectional wheels. These cases include use in a sweeping motion and use in a track lock mode. In each case the fixed wheels insure that the trimmer travels in a predetermined direction which the operator either swings in an arc or pushes linearly.

Duda is cited as teaching a universal joint between the handle and base. Duda also teaches the necessity for caster wheels. In use, the device of Duda is swept back and forth with the vacuum end trailing in all directions. It is clear that unidirectional wheels would be detrimental to the operation of Duda.

In the present invention two unidirectional wheels and one caster wheel, in combination with a universal joint, allow the operator to steer the trimmer by twisting the handle as set forth in the specification. This can occur even on uneven ground as set forth in the specification and clearly illustrated in Fig. 4. By merely rotating the handle the trimmer can be directed up or down the hill or parallel to the hill. This provides a capability which is not available in either Smith or Duda.

If one were to combine Smith and Duda, as suggested by the Office, the combination would be in conflict with each reference. As described in Col. 7, lines 11-31 of Duda the purpose of the universal joint is to be able to swing the body endwise as the direction is reversed. If fixed wheels were incorporated in the system of Duda the desire that the suction end trail in all directions would be thwarted thereby eliminating the advantage offered by the universal joint and eliminating that feature which renders the device operational. The combination of unidirectional wheels and a universal joint would be considered to be in conflict based on the combined teachings of Smith and Duda.

One has no motivation for incorporating the universal joint in the device of Smith since the desire to swing the trimmer endwise, as provided by the universal joint, provides

no benefit. Even if one were to contemplate incorporating the universal joint of Duda into the trimmer of Smith they would be expected to utilize casters, as taught in Duda, since the advantage offered would be the ability to swing the trimmer edgewise. One of skill in the art would have no reason to attempt such a combination except in hindsight based on the present disclosure.

Independent claims 1 and 6 each require two unidirectional wheels, a multidirectional wheel, a handle and a universal joint connecting the handle to the base. There is no motivation to combine Smith and Duda to achieve such a combination and no teaching, except in the present disclosure, to suggest that such a combination would provide features not otherwise available in the art. Specifically, the ability to steer the trimmer by rotating the handle and allowing the trimmer to pivot on one unidirectional wheel or the other to change direction in response to the steering action is a feature not contemplated by the cited art. With caster wheels the direction of travel is not altered by rotation of the handle. This steerability provides a patentably distinct advantage not otherwise available and not otherwise contemplated absent the present teachings.

With regards to claims 6-10, the Office opines that it would be obvious to include the universal joint to facilitate

guiding the base. This is contrary to the teachings of Duda which specifically allow the base to be rotated so that the suction end always trails. The base is guided by dragging not steering as allowed by the present invention.

The Office further opines that it would be obvious to locate the two unidirectional wheels at the front of the base and the multidirectional wheel at the rear of the base. Applicants respectfully submit that Duda would suggest that all wheels should be caster wheels to allow the utility of the universal joint to be exploited. Smith would lock all wheels in parallel or leave one of the three as a caster and fix any other two without regard for which two. Only in hindsight can the advantage of the claimed configuration be realized.

With regards to claims 11-17, the Office opines that it would be obvious to utilize a handle attachment element capable of transmitting rotation of the base. In Duda the rotation is specific to insure that the suction section is the trailing portion of the device. There is no teaching that would suggest that this represents an advantage for string trimmers since there is no portion which must be trailing for the device to function properly. Only in light of the present disclosure would Smith be modified by Duda and, even then, the result is a feature which provides no benefit to Smith.

In summary, the rejection of claims 1, 6 and 11 are based on hindsight wherein a combination of elements are brought together in a way which is contrary to the art to provide features which are not additive and which are contradictory based on the teachings in the art. The rejection of claims 1, 6 and 11 under 35 U.S.C. 103(a) is therefore improper and removal is respectfully requested.

Claims 2, 4 and 5 depend from claim 1 and are patentable for, at least, the same reasons as claim 1. Claims 7-10 depend from claim 6 and are patentable for, at least, the same reasons as claim 6. Claims 12-17 depend from claim 11 and are patentable for, at least, the same reasons as claim 11.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and Duda, as applied to claim 1 above, and further in view of Wolfe, Sr.

Smith and Duda fail to render claim 1 obvious for, at least, the reasons set forth previously. Wolfe Sr. further suggest that a fixed handle and caster wheels would still be beneficial even if a second handle is used. There is no suggestion, or motivation, in Wolfe Sr. to suggest that the second handle would alter the teachings of Smith and Duda.

Claim 3 is patentable for, at least, the same reasons as claim 1 and removal of the rejection is respectfully requested.

SUPPLEMENTAL INFORMATION

Included herewith is a CD containing a video of a mock-up of the inventive device in operation in readily available Windows Media Player format. As seen in the video the combination of unidirectional front wheels, a multidirectional rear wheel and a universal joint connecting the handle to the base allows the string trimmer to be driven around obstacles and controlled on steep terrain. This is an advantage not taught in the art and it solves a problem not anticipated in the cited art.

Applicants respectfully request the courtesy of a telephone interview after the Examiner has had an opportunity to review the CD and prior to issuance of any further action.

CONCLUSIONS

Claims 1-17 are pending in the present application. All claims are in condition for allowance and notice thereof is respectfully requested.

Respectfully submitted,



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